

CLAIMS

1. A data processing system comprising:
a reader that is configured to read data representing a video sequence and a
5 number of associated data each having a corresponding command;
a presentation engine for outputting the video sequence derived from the data
representing the video sequence;
a navigation engine, responsive to an event, to invoke one of the
corresponding commands according to the output of the video sequence; and
10 means to derive a first value from the invoked command of the corresponding
commands.
2. A data processing system as claimed in claim 1 in which the data
representing the video sequence comprises a plurality of data structures, each of the
15 data structures being associated with a respective one of the corresponding
commands.
3. A data processing system as claimed in claim 2 in which the plurality
of data structures comprises a plurality of Group-of-Pictures structures.
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4. A data processing system as claimed in claim 1 in which the associated
data comprises at least a command to influence the operation of at least one of the
navigation engine and the presentation engine.
- 25 5. A data processing system as claimed in claim 1 in which the
corresponding commands comprise associated values used to produce the first value.
6. A data processing system as claimed in claim 1 in which the
corresponding commands comprise respective navigation commands associated with
30 data representing a further video sequence.

7. A data processing system as claimed in claim 6 in which the navigation commands are executable to retrieve the data representing the further video sequence and to cause the presentation engine to derive the further video sequence from the data representing the further video sequence.

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8. A data processing system as claimed in claim 1 in which the means to derive the first value comprises a register arranged to store a time varying value during the output of the video sequence by the presentation engine.

10 9. A data processing system as claimed in claim 8 in which the register is a GPRM register set to counter mode.

10. A data processing system as claimed in claim 8 in which the means to derive the first value comprises a combiner that is configured to combine the time
15 varying value of the register with data associated with the invoked command.

11. A data processing system as claimed in claim 10 in which the combiner comprises an adder that is configured to add the time varying value of the register to the data associated with the invoked command.

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12. A data processing system as claimed in any claim 1 in which the means to derive the first value further comprises means to derive the first value from an initialisation value.

25 13. A data processing system as claimed in claim 12 in which the initialisation value is generated by a random number generator.

14. A data processing system as claimed in claim 1 further comprising means to generate a sequence of values from the first value.

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15. A data processing system as claimed in claim 14 in which the means to

generate the sequence comprises means to generate the sequence with a predeterminable number of non-repeating values.

5 16. A data processing system as claimed in claim 14 in which the means to generate the sequence comprises a calculator that is configured to perform an iterative operation to calculate the values of the sequence.

10 17. A data processing system as claimed in claim 16 in which iterative operation calculates $r_{i+1} = ar_i + b \bmod c$, where a and b are constants, r_1 is the first value and c is prime.

15 18. A storage medium comprising data representing a video sequence and a number of associated data each having a corresponding command; and data to derive a first value from one of the corresponding commands in response to an event.

 19. A storage medium as claimed in claim 18 in which the data representing the video sequence comprises a plurality of data structures, each of the data structures being associated with a respective one of the corresponding commands.

20 20. A storage medium as claimed in claim 19 in which the plurality of data structures comprises a plurality of Group-of-pictures structures.

25 21. A storage medium as claimed in claim 20 in which the associated data comprises at least a command to influence the operation of at least one of a navigation engine and a presentation engine.

30 22. A storage medium as claimed in claim 18 in which the corresponding commands comprise respective navigation commands associated with data representing a further video sequence.

23. A storage medium as claimed in claim 22 in which the navigation commands are executable to retrieve the data representing the further video sequence and to cause the presentation engine to derive the further video sequence from the data representing the further video sequence.

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24. A storage medium as claimed in claim 18 further comprising a command to arrange for a register to produce a time varying value during output of the video sequence by the presentation engine.

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25. A storage medium as claimed in claim 24 in which the command to arrange for the register to produce the time varying value comprises a command to cause a GPRM to assume a counter mode.

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26. A storage medium as claimed in claim 24 further comprising data to derive a first value, in response to an event, from one of the corresponding commands.

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27. A storage medium as claimed in claim 26 in which the data to derive the first value further comprises data to derive the first value from an initialisation value.

28. A storage medium as claimed in claim 27 in which the initialisation value is generated by a random number generator.

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29. A storage medium as claimed in any of claim 26 further comprising data to generate a sequence of values from the first value.

30. A storage medium as claimed in claim 29 in which the data to generate the sequence comprises data to generate a sequence comprising a predeterminable number of non-repeating values.

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31. A storage medium as claimed in claim 29 in which the data to generate

the sequence comprises a command to perform an iterative operation to calculate the values of the sequence.

5 32. A storage medium as claimed in claim 31 in which the iterative operation calculates $r_{i+1} = ar_i + b \bmod c$, where a and b are constants, r_1 is the first value and c is prime.

10 33. A storage medium as claimed in claim 18, in which the medium is a DVD.

15 34. A data processing system comprising:
 means to play an interruptible or skipable video sequence; and
 a random number generator configured to generate a random number associated with an interruption of the interruptible or skipable video sequence.

20 35. A data processing method comprising:
 playing an interruptible or skipable video sequence; and
 generating a random number associated with an interruption of the interruptible or skipable video sequence.